

### REMARKS

Claims 1-3, 9-21, and 25-32 are pending in this application. By this Amendment, claims 1, 28, 31, and 32 are amended. Reconsideration in view of the above amendments and following remarks is respectfully requested.

Applicants gratefully acknowledge the courtesies extended by the Examiner on February 20, 2007 regarding the above identified application in a personal interview.

As discussed in the interview, the application has been amended to describe the antenna of claim 1 as including open ended continuous coils to obviate the 35 U.S.C. §112 rejection. Applicants note that this amendment has been made purely for the purposes of obviating the 35 U.S.C. §112 rejection and is merely directed to clarifying the claimed interpretation of the Examiner. Similarly, in claim 28, the claim has been amended to recite open ended continuous portions in order to obviate the 35 U.S.C. §112 rejections as discussed in the interview. Support for these amendments can be found in the original disclosure, for example, see Figures 10 and 11.

#### 1. 35 U.S.C. §112

The Office Action rejects claims 1-3, 9-21, 25 and 27-31 under 35 U.S.C. §112. Applicants submit that the above amendments obviate the rejection for the reasons discussed in the interview, which includes further describing the coils as continuous coils, but with an open end rather than a closed end, or completed circuit. Withdrawal of the rejection is respectfully requested.

**2. 35 U.S.C. §102(b)**

The Office Action rejects claim 32 under 35 U.S.C. §102(b) as being anticipated by *Gates* (U.S. Patent No. 5,731,565). The rejection is respectfully traversed.

Claim 32 recites an inductively coupled plasma (ICP) generating apparatus comprising: an evacuated reaction chamber; an antenna installed at an upper portion of the reaction chamber to induce an electric field for ionizing reaction gas supplied into the reaction chamber and generating plasma; and a radio frequency (RF) power source connected to the antenna to apply radio frequency power to the antenna, wherein the antenna comprises three coils: a first center, circular coil; a second serpentine shaped coil surrounding the first coil; and a third coil communicatively connecting the first coil to the second coil; wherein the second serpentine shaped coil has inner portions shaped to nest in a complementary manner to the shape of the outer surface of the first coil, wherein the second serpentine shaped coil has outer portions shaped to nest in a complementary manner to the shape of the inner surface of the third coil, and wherein the second serpentine shaped coil has connecting portions connecting the inner portions and the outer portions and the connecting portions are aligned in approximately radial directions, wherein the third coil has inner portions complementary to the outer surface of the second coil, outer portions complementary to the inner surface of the reaction chamber and connecting portions connecting the inner portions and the outer portions, and wherein the first, second and third coils do not overlap one another.

Applicants respectfully submit that *Gates* discloses a coiled segmented transformer coupled plasma coil but fails to disclose or suggest the combination of

features of claim 32, which includes at least the features of a second serpentine shaped coil, with the shapes as claimed in claim 32. See the Figures in *Gates* compared to, for example, Figures 10, 11, 12A-12G, 14, and 15 of the present application.

For at least the reasons set forth above, Applicants respectfully submit that claim 32 is allowable. Withdrawal of the rejection is respectfully requested.

### 3. Conclusion

Applicants invite the Examiner to contact Applicants' representative at the telephone number listed below if any issues remain in this matter, or if a discussion regarding any portion of the application is desired by the Examiner.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicants respectfully petition for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

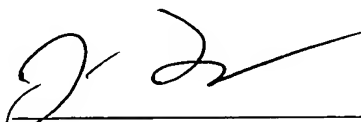
In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

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